Government of
Saskatchewan

Annual Report 2002

Saskatchewan Health
Vital Statistics

1942 Hamilton Street
Regina, Saskatchewan
S4P 3V7

103-04757/

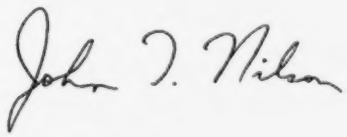
Letters of Transmittal

To the Honourable Dr. L.M. Haverstock
Lieutenant Governor of Saskatchewan

May It Please Your Honour:

We respectfully submit, for your consideration, the Annul Report on Saskatchewan Vital Statistics for the calendar year 2002.

Respectfully submitted,



John T. Nilson, Q.C.
Minister of Health

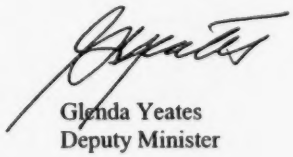
To the Honourable John T. Nilson, Q.C.
Minister of Health

Your Honour:

On behalf of department staff, I am pleased to present the Annual Report on Saskatchewan Vital Statistics for the calendar year 2002.

This report presents a concise record of those vital events that occurred in Saskatchewan during the calendar year 2002.

Respectfully submitted,



Glenda Yeates
Deputy Minister

Table of Contents

	Page
Terms and Definitions	1
Introduction	3
Population	5
Births	6
Stillbirths	7
Deaths	7
Accidents and Violence	12
Natural Increase in Population	12
Marriages	13
Divorces	14
Life Expectancy	14
Adoptions	15
Legal Changes of Name	16

List of Tables

		Page
Table 1.	Summary of Vital Statistics, Saskatchewan, 1997-2002	4
Table 2.	The Historical Trend in Saskatchewan Population	5
Table 3.	Distribution of Total Population, Saskatchewan, 2002	6
Table 4.	Percentage Distribution by Sex, Saskatchewan, for Selected Years	6
Table 5.	Live Birth Rates per 1,000 Population, Canada and the Provinces, 1999	7
Table 6.	Crude Death Rates per 1,000 Population, Canada and the Provinces, 1999	8
Table 7.	Age Specific Death Rates per 1,000 Population, Saskatchewan, 1987-2002	8
Table 8.	Deaths by Leading Causes, with Percent Distribution and Rates per 100,000 Population, Saskatchewan, 2002	9
Table 9.	Natural Increase and Actual Increase, Saskatchewan, 1989 – 2002	13
Table 10.	Marriage Rates per 1,000 Population, Canada and the Provinces, 1999	13
Table 11.	Life Expectancy, Saskatchewan, 1941, 1961, 1981, and 1996	15

Terms and Definitions

A summary of symbols, definitions, and the method of computing rates used in this report are given below.

Definitions

Population	This report contains postcensal estimates for 1987 - 1990, 1992 - 1995, 1997 - 2002 and final census figures for 1986, 1991 and 1996.
Live Births	Infants born alive, i.e., excluding stillbirths.
Stillbirths	Fetal deaths occurring after at least 20 weeks pregnancy or after attaining a weight of at least 500 grams.
Deaths	Excludes stillbirths.
Infant Deaths	Deaths under 1 year of age.
Neonatal Deaths	Deaths under 28 days (4 weeks) of age.
Perinatal Deaths	Fetal deaths of 500 grams or more plus infant deaths under 7 days (1 week) of age.
Natural Increase	Excess of births over deaths.

Rates (unless otherwise indicated, computed as follows)

Live Births	: per 1,000 population
Stillbirths	: per 1,000 live births
Marriages	: per 1,000 population
Divorces	: per 100,000 population
Natural Increase	: per 1,000 population

Causes of Death

All Causes	: per 100,000 population
Infant	: per 1,000 live births
Neonatal	: per 1,000 live births
Perinatal	: per 1,000 live births and stillbirths

Notes

1. Causes of death are classified according to the 10th (1994) Revision of the International Classification of Diseases, Injuries and Causes of Death, which was put into effect on January 1, 2000.

Introduction

The Vital Statistics Annual Report represents a concise record of those vital events which occurred in Saskatchewan during the calendar year. The Report has been prepared in accordance with the requirements of subsections 50(1) and 50(2) of *The Vital Statistics Act, 1995.*

The Vital Statistics Annual Report 2002 records vital events by place of occurrence for 2002 (vital events which occurred in Saskatchewan in 2002). It includes for example, births to Saskatchewan residents who were in the province at the time of giving birth as well as residents of other provinces (or countries) who were in Saskatchewan at the time of giving birth.

The data in this report are based on original registration forms and do not include amendments. The vital events recorded in this report for years previous to 2002 are by place of residence, unless otherwise indicated.

Table 1. Summary of Vital Statistics, Saskatchewan 1997 – 2002

Item	1997	1998	1999*	2000*	2001*	2002*
Population	1,024	1,024	1,028	1,024	1,017	1,012
Live Births	12,860	12,710	12,481	12,040	12,220	11,733
Crude Rate++	12.6	12.4	12.1	11.8	12.0	11.6
Deaths	8,637	8,838	8,947	8,898	8,745	8,818
Crude Rate++	8.4	8.6	8.7	8.7	8.6	8.7
Natural Increase	4,223	3,872	3,534	3,142	3,475	2,915
Crude Rate++	4.1	3.8	3.4	3.1	3.4	2.9
Infant Deaths	114	90	76	71	66	57
Crude Rate**	8.9	7.1	6.1	5.9	5.4	4.9
Neonatal Deaths	77	83	66	58	63	54
Crude Rate**	6.0	6.5	5.3	4.8	5.2	4.6
Perinatal Deaths@						
500 grams or more (20+ weeks Gestation)	127	121	115	104	128	126
Crude Rate+++	9.8	9.5	9.2	8.6	10.4	10.7
500 grams or more (28+ weeks Gestation)	112	107	91	91	95	97
Crude Rate+++	8.7	8.4	7.3	7.5	7.7	8.2
Stillbirths@						
500 grams or more (20+ weeks Gestation)	60	62	72	72	82	86
Crude Rate**	4.7	4.9	5.8	6.0	6.7	7.3
500 grams or more (28+ weeks Gestation)	45	48	48	59	49	57
Crude Rate**	3.5	3.8	3.8	4.9	4.0	4.9
Marriages	5,707	5,671	5,900	5,690	5,028	5,051
Crude Rate++	5.6	5.5	5.7	5.6	4.9	5.0
Divorces and Annulments	2,195	2,223	2,230	2,222	1,976	1,974

* Postcensal estimates. Estimates for 2001 and 2002 per Statistics Canada at July 1.
** Crude Rate per 1,000 live births
++ Crude Rate per 1,000 population
+++ Crude Rate per 1,000 total births (live births and stillbirths)
@ See Terms and Definitions, page 1

A. Population

1. The Historical Trend

The estimated population of 1,011,808 for 2002 is a decrease of 0.52 per cent over the 2001estimated population of 1,017,087.

Table 2. The Historical Trend in Saskatchewan Population

Year	Population (000's)
1931	922
1941	896
1951	832
1961	925
1971	926
1981	968
1991	991
2001	1,017*
2002	1,012*

* Statistics Canada Postcensal Estimate at July 1. All other figures are final census.

2. The Percentage Distribution of the Total Population

During the past 30 years, the proportion of older people (65 years of age and over) has been increasing in Canada as a whole and in Saskatchewan. In Saskatchewan, however, the proportion of persons 65 years of age and over is greater than in Canada as a whole (14.6 percent and 12.7 percent respectively).

Table 3. Distribution of Total Population, Saskatchewan, 2002 (000's)

	Canada		Saskatchewan	
Age Group	Number	Percent	Number	Percent
Total	31,414.0	100.0	1,012.0	100.0
0-19	7,904.3	25.2	289.1	28.6
20-44	11,840.6	37.7	350.7	34.7
45-64	7,679.8	24.4	224.5	22.2
65+	3,989.2	12.7	147.5	14.5

Table 4. Percentage Distribution by Sex, Saskatchewan, for Selected Years

Year	Male	Female	Males per 100 Females
1921	54.6	45.4	120
1931	54.2	45.8	119
1941	53.3	46.7	114
1951	52.2	47.8	109
1961	51.8	48.2	108
1971	50.8	49.2	103
1981	50.2	49.8	101
1991	49.6	50.4	99
2001	49.6	50.4	98
2002	49.6	50.4	98

B. Births

1. Live Births

During the year 2002 a total of 11,733 live births occurred in the province of Saskatchewan. This total includes births to Saskatchewan mothers residing in the province at the time of giving birth and those births occurring to mothers who normally reside outside the province but who were in Saskatchewan at the time of giving birth.

The total of 11,733 live births represents a crude birth rate of 11.6 live births per 1,000 population, which is slightly lower than last year's birth rate.

The 1999 birth rates for Saskatchewan, for Canada, and for the Provinces are shown below for comparison.

Table 5. Live Birth Rates per 1,000 Population, Canada and Provinces, 1999

Province	Rate
Canada	11.1
Newfoundland	9.3
Prince Edward Island	11.0
Nova Scotia	10.2
New Brunswick	10.1
Quebec	10.0
Ontario	11.4
Manitoba	12.5
Saskatchewan	12.3
Alberta	12.9
British Columbia	10.4
Yukon	12.3
Northwest Territories	16.1
Nunavut	27.4

2. Stillbirths

During the year 2002 a total of 86 stillbirths occurred in the province. The definition of stillbirth is given in the introduction. The 86 stillbirths occurred after 20 or more weeks gestation; 57 of the stillbirths occurred after 28 or more weeks gestation. These two totals represent crude rates of 7.3 and 4.8 stillbirths per 1,000 live births respectively.

C. Deaths

During the year 2002 a total of 8,818 deaths occurred within the province of Saskatchewan. This represents a crude death rate of 8.7 deaths per 1,000 population, which is slightly higher than the 2001 crude rate of 8.6 deaths per 1,000 population.

The 1999 crude death rates for Saskatchewan, for Canada, and for the provinces are shown in the table below for comparison.

Table 6. Crude Death Rates per 1,000 Population, Canada and Provinces, 1999

Province	Rate
Canada	7.2
Newfoundland	7.7
Prince Edward Island	8.3
Nova Scotia	8.1
New Brunswick	8.0
Quebec	7.4
Ontario	7.1
Manitoba	8.6
Saskatchewan	8.8
Alberta	5.8
British Columbia	7.0
Yukon	4.3
Northwest Territories	4.0
Nunavut	4.7

Table 7. Age Specific Death Rates per 1,000 Population, Saskatchewan, 1987 – 2002

	All	Age Group					
Year	Ages	Under 5	5-14	15-24	25-44	45-64	65+
1987	7.7	2.2	0.4	1.1	1.1	6.6	44.8
1988	8.0	2.1	0.3	1.0	1.3	6.7	46.3
1989	7.9	2.0	0.2	0.8	1.2	6.2	45.4
1990	8.0	2.0	0.2	0.9	1.1	6.3	46.0
1991	8.1	1.8	0.2	1.0	1.2	6.0	45.9
1992	7.8	1.7	0.2	0.9	1.1	5.5	44.0
1993	8.1	1.9	0.2	0.9	1.1	5.8	44.8
1994	8.2	2.0	0.3	0.8	1.1	5.9	44.9
1995	8.4	2.2	0.3	0.8	1.2	5.8	45.5
1996	8.6	1.9	0.2	0.7	1.2	5.5	47.4
1997	8.4	2.0	0.3	0.7	1.2	5.3	46.9
1998	8.7	1.6	0.1	0.8	1.0	5.2	48.4
1999*	8.7	1.5	0.2	0.6	1.1	5.2	49.2
2000*	8.7	1.5	0.2	0.8	1.2	4.9	49.0
2001*	8.6	1.3	0.1	0.7	1.1	4.9	48.4
2002*	8.7	1.2	0.2	0.7	1.0	4.9	48.9

* See footnotes in Table 1

Table 8. Number of Deaths Occurring in Saskatchewan in 2002

	Deaths	Percent	Rate*
All Causes of Death	8,818	100.0	871.5
1 Salmonella infections	0	0.0	0.0
2 Shigellosis and amebiasis	0	0.0	0.0
3 Certain other intestinal infections	8	0.1	0.8
4 Respiratory tuberculosis	1	0.0	0.1
5 Other tuberculosis	1	0.0	0.1
6 Whooping cough	0	0.0	0.0
7 Scarlet fever and erysipelas	0	0.0	0.0
8 Meningococcal infection	0	0.0	0.0
9 Septicemia	53	0.6	5.2
10 Syphilis	0	0.0	0.0
11 Acute poliomyelitis	0	0.0	0.0
12 Arthropod-borne viral encephalitis	0	0.0	0.0
13 Measles	0	0.0	0.0
14 Viral hepatitis	8	0.1	0.8
15 Human immunodeficiency virus (HIV) disease	4	0.0	0.4
16 Malaria	0	0.0	0.0
17 Other and unspecified infectious and parasitic diseases and their sequelae	19	0.2	1.9
18 Malignant neoplasms of lip, oral cavity and pharynx	38	0.4	3.8
19 Malignant neoplasm of esophagus	52	0.6	5.1
20 Malignant neoplasm of stomach	68	0.8	6.7
21 Malignant neoplasms of colon, rectum and anus	233	2.6	23.0
22 Malignant neoplasms of liver and intrahepatic bile ducts	40	0.5	4.0
23 Malignant neoplasm of pancreas	115	1.3	11.4
24 Malignant neoplasm of larynx	15	0.2	1.5
25 Malignant neoplasms of trachea, bronchus and lung	557	6.3	55.1
26 Malignant melanoma of skin	23	0.3	2.3
27 Malignant neoplasm of breast	162	1.8	16.0
28 Malignant neoplasm of cervix uteri	12	0.1	1.2
29 Malignant neoplasms of corpus uteri and uterus, part unspecified	20	0.2	2.0
30 Malignant neoplasm of ovary	47	0.5	4.6
31 Malignant neoplasm of prostate	215	2.4	21.2
32 Malignant neoplasms of kidney and renal pelvis	53	0.6	5.2
33 Malignant neoplasm of bladder	47	0.5	4.6
34 Malignant neoplasms of meninges, brain and other parts of central nervous system	47	0.5	4.6
35 Hodgkin's disease	2	0.0	0.2
36 Non-Hodgkin's lymphoma	99	1.1	9.8
37 Leukemia	81	0.9	8.0
38 Multiple myeloma and immunoproliferative neoplasms	41	0.5	4.1

	Deaths	Percent	Rate*
39 Other and unspecified malignant neoplasms of lymphoid, hematopoietic and related tissue	0	0.0	0.0
40 All other and unspecified malignant neoplasms	335	3.8	33.1
41 In situ neoplasms, benign neoplasms and neoplasms of uncertain or unknown behavior	57	0.6	5.6
42 Anemias	35	0.4	3.5
43 Diabetes mellitus	323	3.7	31.9
44 Malnutrition	6	0.1	0.6
45 Other nutritional deficiencies	5	0.1	0.5
46 Meningitis	1	0.0	0.1
47 Parkinson's disease	75	0.9	7.4
48 Alzheimer's disease	230	2.6	22.7
49 Acute rheumatic fever and chronic rheumatic heart diseases	11	0.1	1.1
50 Hypertensive heart disease	45	0.5	4.4
51 Hypertensive heart and renal disease	7	0.1	0.7
52 Acute myocardial infarction	661	7.5	65.3
53 Other acute ischemic heart diseases	7	0.1	0.7
54 Atherosclerotic cardiovascular disease, so described	107	1.2	10.6
55 All other forms of chronic ischemic heart disease	702	8.0	69.4
56 Acute and subacute endocarditis	3	0.0	0.3
57 Diseases of pericardium and acute myocarditis	5	0.1	0.5
58 Heart failure	320	3.6	31.6
59 All other forms of heart disease	340	3.9	33.6
60 Essential (primary) hypertension and hypertensive renal disease	82	0.9	8.1
61 Cerebrovascular diseases	693	7.9	68.5
62 Atherosclerosis	38	0.4	3.8
63 Aortic aneurysm and dissection	74	0.8	7.3
64 Other diseases of arteries, arterioles and capillaries	47	0.5	4.6
65 Other disorders of circulatory system	16	0.2	1.6
66 Influenza	20	0.2	2.0
67 Pneumonia	239	2.7	23.6
68 Acute bronchitis and bronchiolitis	3	0.0	0.3
69 Unspecified acute lower respiratory infection	4	0.0	0.4
70 Bronchitis, chronic and unspecified	13	0.1	1.3
71 Emphysema	42	0.5	4.2
72 Asthma	0	0.0	0.0
73 Other chronic lower respiratory diseases	303	3.4	29.9
74 Pneumoconioses and chemical effects	3	0.0	0.3
75 Pneumonitis due to solids and liquids	28	0.3	2.8
76 Other diseases of respiratory system	90	1.0	8.9
77 Peptic ulcer	20	0.2	2.0
78 Diseases of appendix	1	0.0	0.1
79 Hernia	8	0.1	0.8

	Deaths	Percent	Rate*
80 Alcoholic liver disease	55	0.6	5.4
81 Other chronic liver disease and cirrhosis	46	0.5	4.5
82 Cholelithiasis and other disorders of gallbladder	4	0.0	0.4
83 Acute and rapidly progressive nephritic and nephrotic syndrome	1	0.0	0.1
84 Chronic glomerulonephritis, nephritis & nephritis not specified as acute or chronic and renal sclerosis unspecified	2	0.0	0.2
85 Renal failure	176	2.0	17.4
86 Other disorders of kidney	0	0.0	0.0
87 Infections of kidney	1	0.0	0.1
88 Hyperplasia of prostate	1	0.0	0.1
89 Inflammatory diseases of female pelvic organs	1	0.0	0.1
90 Pregnancy with abortive outcome	0	0.0	0.0
91 Other complications of pregnancy, childbirth and the puerperium	0	0.0	0.0
92 Certain conditions originating in the perinatal period	30	0.3	3.0
93 Congenital malformations, deformations and chromosomal abnormalities	29	0.3	2.9
94 Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	128	1.5	12.7
95 All other diseases (Residual)	744	8.4	73.5
96 Motor vehicle accidents	138	1.6	13.6
97 Other land transport accidents	6	0.1	0.6
98 Water, air and space, and other and unspecified transport accidents	2	0.0	0.2
99 Falls	90	1.0	8.9
100 Accidental discharge of firearms	3	0.0	0.3
101 Accidental drowning and submersion	17	0.2	1.7
102 Accidental exposure to smoke, fire and flames	17	0.2	1.7
103 Accidental poisoning and exposure to noxious substances	31	0.4	3.1
104 Other and unspecified nontransport accidents and their sequelae	100	1.1	9.9
105 Intentional self-harm (suicide) by discharge of firearms	31	0.4	3.1
106 Intentional self-harm (suicide) by other and unspecified means and their sequelae	73	0.8	7.2
107 Assault (homicide) by discharge of firearms	2	0.0	0.2
108 Assault (homicide) by other and unspecified means and their sequelae	28	0.3	2.8
109 Legal intervention	0	0.0	0.0
110 Discharge of firearms, undetermined intent	0	0.0	0.0
111 Other and unspecified events of undetermined intent and their sequelae	10	0.1	1.0
112 Operations of war and their sequelae	0	0.0	0.0
113 Complications of medical and surgical care	2	0.0	0.2

*Crude Rate per 100,000 population (Statistics Canada Population Base)

Accidents and Violence

During the year 2002 a total of 404 deaths due to accidents occurred in the province of Saskatchewan. This represents a crude rate of 39.9 deaths by accidents per 100,000 population in 2002 as compared to a crude rate of 39.7 deaths by accident per 100,000 population in 2001.

The number of suicides, which occurred in Saskatchewan during 2002, was 104. This represents a crude rate of 10.3 suicides per 100,000 population, which is slightly higher than the 10.1 crude rate per 100,000 population recorded in 2001.

There were 30 homicides in Saskatchewan in 2002. This represents an increase over the 25 homicides recorded in 2001.

D. Natural Increase in Population

In 2002 the natural increase was 2,915 and the estimated actual increase was –5,279 giving rates per 1,000 population of 2.9 and –5.2 respectively.

Table 9. Natural Increase and Actual Increase, Saskatchewan, 1989 – 2002*

Year	Population	Live Births	Deaths	Natural Increase Number	Natural Increase Rate per 1,000 Pop.	Est. Actual Increase Number	Est. Actual Increase Rate per 1,000 Pop.
1989	1,007,000	16,572	7,861	8,711	8.7	-4,200	-4.2
1990	1,000,300	16,090	8,044	8,046	8.0	-6,700	-6.7
1991	997,000	15,304	8,098	7,206	7.2	-3,300	-3.3
1992	993,700	15,004	7,793	7,211	7.3	-3,300	-3.3
1993	1,003,100	14,269	8,164	6,105	6.1	9,400	9.4
1994	1,016,200	14,038	8,308	5,730	5.6	13,100	12.9
1995	1,016,162	13,515	8,475	5,040	5.0	-38	-0.04
1996	1,022,537	12,974	7,713	5,261	5.1	6,375	6.2
1997	1,023,500	12,860	8,637	4,223	4.1	963	0.9
1998	1,024,387	12,777	8,838	3,939	3.8	887	0.9
1999*	1,027,780	12,481	8,947	3,534	3.4	3,393	3.3
2000*	1,023,636	12,040	8,898	3,142	3.1	-4,144	-4.0
2001*	1,017,087	12,220	8,745	3,475	3.4	-6,549	-6.4
2002*	1,011,808	11,733	8,818	2,915	2.9	-5,279	-5.2

* See footnotes in Table 1

E. Marriages

During the year 2002 a total of 5,051 marriages occurred in Saskatchewan. This total represents a crude rate of 5.0 marriages per 1,000 population. Marriage rates for Canada, the Provinces, and Saskatchewan for 1999 are given below for comparison.

Table 10. Marriages Rate per 1,000 Population, Canada and the Provinces, 1999

Province	Rate
Canada	5.0
Newfoundland	5.7
Prince Edward Island	6.4
Nova Scotia	5.4
New Brunswick	5.3
Quebec	3.1
Ontario	5.6
Manitoba	5.6
Saskatchewan	5.6
Alberta	6.1
British Columbia	5.4
Yukon	5.2
Northwest Territories	3.2
Nunavut	3.0

F. Divorces

In 2002 a total of 1,974 divorces and annulments were registered under *The Vital Statistics Act, 1995* in Saskatchewan at the time of publication. This does not represent the total number of divorce petitions filed in 2002 since some petitions are not yet finalized.

G. Life Expectancy

A life expectancy table is, in effect, the history of mortality of 100,000 male babies and of 100,000 female babies born at the same time. Life expectancy figures provide a graphic picture of the extent to which the saving of lives has gradually prolonged the average expectation of life and are a fairly good reflection of the general health and survival conditions at the time of their compilation.

According to the Saskatchewan life table compiled on the basis of the 1996 census, the life expectancy at birth reached an all time peak for females, 81.30 years, and for males, 75.40 years. The gain in life expectancy is greater in females.

Table 11. Life Expectancy, Saskatchewan, 1941, 1961, 1981, 1996.

	Life Expectancy				Gain or Loss In Life Expectancy		
	1941	1961	1981	1996	1961 over 1941	1981 over 1961	1996 over 1981
			Males				
At Birth	65.43	70.27	72.43	75.40	4.84	2.16	2.97
20	51.28	53.49	54.35	56.60	2.21	0.86	2.25
40	33.32	34.99	35.92	37.90	1.67	0.93	1.98
60	16.82	18.10	19.09	20.40	1.28	0.99	1.31
80	5.76	6.31	7.16	7.60	0.55	0.85	0.44
			Females				
At Birth	68.19	75.93	79.61	81.30	7.74	3.68	1.69
20	53.08	58.35	60.85	62.40	5.27	2.50	1.55
40	34.96	39.09	41.64	43.00	4.13	2.55	1.36
60	18.26	21.09	23.65	24.80	2.83	2.56	1.15
80	6.38	7.29	8.94	9.90	0.91	1.65	0.96

Note: Source of figures for 1941: Life Tables for Canada and Regions, 1941 and 1931, D.B.S. Ottawa 1947. These figures have been calculated for the prairie provinces. The figures for 1961 were calculated for Saskatchewan by the Department of Health. The figures for 1981 and 1991 were taken from the Statistics Canada publication, Life Tables, Canada and Provinces, 1980-1982 and 1995-1997.

H. Adoptions

There were 136 adoptions registered in Saskatchewan during 2002, compared to 189 adoptions in 2001. The total of 136 adoptions registered includes out-of-province adoptions of persons born in Saskatchewan as well as adoptions in Saskatchewan of persons born elsewhere.

I. Legal Changes of Name

During 2002 a total of 716 legal change of name applications were registered in Saskatchewan. This represents a decrease from the 755 change of name applications that were registered in 2001. The number of applications does not reflect the number of persons who changed their name as each application may affect more than one person and in some cases, an entire family.